



December 13, 2010

Mr. Phil Isenberg, Chair  
Delta Stewardship Council  
980 Ninth Street, Suite 1500  
Sacramento, California 95814

Re: Delta Plan Water Resources White Paper – Yuba River Flows  
Already Subject to State-of-the-Art Objectives

Dear Mr. Isenberg:

Thank you for the opportunity to comment on the Water Resources white paper that the Council will discuss at its December 2010 meeting. As described in more detail below, that white paper does not reflect the best available information concerning Yuba River streamflow standards. Specifically, on page 2-16, that paper lists the Yuba River as one of the "Streams That Require Objectives Now." That listing fails to acknowledge that, in 2008's Corrected Order WR 2008-14, the State Water Resources Control Board (SWRCB) adopted new streamflow requirements for the Yuba River. Those requirements are a significant part of the historic Yuba River Accord, which resolved 20 years of disputes about the river's streamflows and resulted in Yuba County Water Agency (YCWA) receiving the Governor's Environmental and Economic Leadership Award in 2009. In light of these facts, the SWRCB did not list the Yuba River as requiring further streamflow studies in the draft "high priority streams" report it recently issued under the 2009 Delta Reform Act. Accordingly, the Council should remove the Yuba River from any list of streams that require further streamflow objectives that the Council produces or considers.

#### *Background*

In 1959, following the devastating 1955 Yuba River flood and in recognition of then existing groundwater overdraft in Yuba County, the Legislature created YCWA. YCWA constructed and operates New Bullards Bar Dam and Reservoir on the North Yuba River. That project and its associated irrigation canals deliver up to 350,000 acre-feet of surface water for agriculture and waterfowl habitat in Yuba County, which has alleviated the County's groundwater overdraft. The project's 340-megawatt New Colgate Powerhouse is the peaking plant that PG&E uses to balance the northern 230 KV California power grid at the times of highest electrical demand. New Bullards Bar Reservoir's ability to store cold water and release it in the summer and fall has enabled the Yuba River's salmon and steelhead populations to grow from pre-project conditions.

Pre-project conditions were so detrimental that, in 1961, the Department of Fish and Game (DFG) installed a barrier across the river's mouth to prevent salmon from migrating into the river in September and October of that year. (Wooster et al., *A Report on the Fish and Wildlife Resources of the Yuba River to be Affected by the Marysville Dam and Reservoir and Marysville Afterbay and Measures Proposed to Maintain These Resources*, Appendix (DFG 1970)(excerpts enclosed).)

Finally, through its operation of New Bullards Bar Reservoir, YCWA has been the state's largest source of dry-year water supply via water transfers across the Delta. Beginning in the critical year of 1991 and continuing to today, YCWA's transfers have provided hundreds of thousands of acre-feet of dry-year water to communities and farms in the San Joaquin Valley, southern California and the southern Bay Area.

Beginning with a public trust complaint in 1988, and continuing through a 14-day SWRCB hearing in 1992, a 13-day SWRCB hearing in 2000, two rounds of Superior Court litigation and two interim Court of Appeal decisions, there were very serious conflicts over the streamflow standards to be applied to the lower Yuba River. After several years of technical work and multi-party negotiations, YCWA, DFG and the involved environmental groups agreed on a new streamflow schedule for the lower Yuba River, which the National Marine Fisheries Service and the U.S. Fish and Wildlife Service also supported. After YCWA prepared and certified a \$6,000,000 environmental impact report, on May 20, 2009, the SWRCB adopted the negotiated streamflow standards by amending YCWA's water-right permit to include those standards in the SWRCB's Corrected Order WR 2008-14.

For its negotiation and implementation of the Yuba River Accord, YCWA received the Governor's Environmental and Economic Leadership Award in 2009. Information about this award is available from the California Environmental Protection Agency's Web site at <http://www.calepa.ca.gov/awards/geela/2009/Program.pdf>.

*New Yuba River Streamflow Standards and Exclusion of Yuba River from  
Draft "High Priority" Streams List*

The Yuba River Accord's streamflow standards that the SWRCB adopted are attached. Those standards also include special terms for extremely dry (1-in-100) "conference years." In those years, YCWA would operate its project to maintain the minimum streamflows required by a 1965 streamflow agreement between YCWA and DFG, but without certain reductions authorized by that agreement and subject to supplemental flow release requirements developed by a Planning Group under the Yuba River Accord's Fisheries Agreement and approved by the SWRCB's Deputy Director for Water Rights. Under Corrected Order WR 2008-14, if the Planning Group does not make any streamflow recommendations in a conference year by April 1 or if no streamflow requirements are in place by April 11 of such a year, then YCWA must comply with streamflow requirements ordered by the SWRCB after a hearing. Corrected Order WR 2008-14 is available on-line from the SWRCB's World Wide Web site at

[http://www.waterboards.ca.gov/waterrights/board\\_decisions/adopted\\_orders/orders/2008/wro2008\\_0014corrected](http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2008/wro2008_0014corrected).

As the Council is aware, the 2009 Delta Reform Act requires the SWRCB to submit to the Legislature a schedule and estimate of costs to complete streamflow studies for “high priority rivers and streams in the Delta watershed” by 2012. (Water Code § 85087.) The SWRCB has issued its draft report, which is available on-line at [www.waterboards.ca.gov/waterrights/water\\_issues/programs/instream\\_flows/instreamflow.html](http://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/instreamflow.html). Having adopted new streamflow requirements for the Yuba River in 2008, the SWRCB did not include that river in its draft report as requiring further studies under the Delta Reform Act.

*White Paper Listing of Yuba River as Requiring Further Studies Now*

In light of the extensive studies of the Yuba River’s streamflows that led to the historic Yuba River Accord, it is very surprising to see the Yuba River listed in the Water Resources white paper’s Table 2-1 as needing yet more streamflow studies. (Water Resources white paper, pp. 2-15 to 2-16.) This listing is particularly surprising because the white paper indicates that the list of streams requiring further study derives from DFG documents and yet does not cite any DFG documents as supporting that list. The white paper’s References section does not list any DFG documents as references. (Water Resources white paper, pp. 5-1 to 5-3.)

Notwithstanding the white paper’s lack of citations to DFG documents as supporting its Table 2-1, the apparent support for that table’s listing of “Streams That Require Objectives Now” is DFG’s May 22, 2008 report “Flow Recommendations to the State Water Resources Control Board.” That report is on the SWRCB’s Web site at [http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/bay\\_delta/strategic\\_plan/docs/dfg\\_prc\\_flows.pdf](http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/strategic_plan/docs/dfg_prc_flows.pdf). That report addresses the same list of streams as Table 2-1’s list of “Streams That Require Objectives Now.” That report, however, does not account for the Yuba River Accord and, for the lower Yuba River, discusses only the streamflow recommendations contained in DFG’s 1991 Lower Yuba River Fisheries Management Plan. The Yuba River Accord, and its Fisheries Agreement that DFG signed, supersedes DFG’s 1991 plan. Accordingly, DFG’s 2008 report does not reflect the current status of fisheries management in the lower Yuba River. The Council therefore should not rely on that report in considering fisheries issues relating to the Yuba River and, ideally, should delete the Yuba River from the Water Resources white paper’s Table 2-1. Failing that, the Council should not include any provisions in the Delta Plan concerning the Yuba River based upon that Table 2-1.

*Conclusion*

Thank you again for the opportunity to comment on the Water Resources white paper that the Council will consider at its December 2010 meeting. Unfortunately, that white paper does not reflect the current status of streamflow standards for the lower Yuba

Mr. Phil Isenberg  
December 13, 2010  
Page 4

River. In keeping with the Council's intent to rely on the best available science in making its decisions, we urge the Council to ensure that it has the best available information on the status of regulatory issues that are relevant to its development of the Delta Plan. The Council accordingly should remove the Yuba River from its list of streams requiring further streamflow studies.

Very truly yours, ..

A handwritten signature in cursive script, appearing to read "Curt Aikens".

Curt Aikens  
General Manager

L121310 Delta Council  
Enclosure

Cc: Cal. Department of Fish and Game  
National Marine Fisheries Service  
U.S. Fish and Wildlife Service

### Yuba Accord Streamflows, Approved by SWRCB in Corrected Order WR 2008-14

MARYSVILLE GAGE (CFS)																	
Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP	Total Annual Volume (AF)
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30	
1	500	500	500	500	500	500	700	1000	1000	2000	2000	1500	1500	700	600	500	574,200
2	500	500	500	500	500	500	700	700	800	1000	1000	800	500	500	500	500	429,066
3	500	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500	398,722
4	400	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400	361,944
5	400	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400	334,818
6	350	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350	232,155
* Indicated flows represent average volumes for the specified time period. Actual flows may vary from the indicated flows according to established criteria. * Indicated Schedule 6 flows do not include an additional 30 TAF available from groundwater substitution to be allocated according to established criteria																	

SMARTVILLE GAGE (CFS)																	
Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP	Total Annual
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30	Volume (AF)
A	700	700	700	700	700	700	700	700	-	-	-	-	-	-	-	700	-
B	600	600	600	550	550	550	550	600	-	-	-	-	-	-	-	500	-
* Schedule A used with Schedules 1, 2, 3 and 4 at Marysville. * Schedule B used with Schedules 5 and 6 at Marysville.																	

State of California  
The Resources Agency  
Department of Fish and Game

A REPORT ON THE FISH AND WILDLIFE RESOURCES OF THE YUBA  
RIVER TO BE AFFECTED BY THE MARYSVILLE DAM AND RESER-  
VOIR AND MARYSVILLE AFTERBAY AND MEASURES PROPOSED TO  
MAINTAIN THESE RESOURCES<sup>1/</sup>

by

T. W. Wooster, Associate Fishery Biologist  
and  
Russell H. Wickwire, Assistant Fishery Biologist  
Region II, Environmental Services Branch

SUMMARY

The U. S. Corps of Engineers has proposed further development of hydro-electric power and water in the lower Yuba River system.

Existing and proposed Corps developments are described.

Biological studies carried out by the Department of Fish and Game since 1959 to determine probable effects of existing and proposed developments upon fish and wildlife resources of the area are discussed.

Existing developments have had adverse effects on fishlife. Present developments completed in 1970 will enhance the fishlife. Proposed developments would adversely affect fish and wildlife unless adequate protective measures are provided. The proposed project could mitigate the king salmon and steelhead resource if sufficient, stabilized flow releases, low water temperatures and hatchery facilities are provided.

Specific recommendations for maintenance and protection of fish and wildlife resources under project development have been presented.

Recorded field notes of River Conditions Influencing Salmon Spawning in the Main Yuba River - 1938 and 1954 through 1969.

### 1938

In order that a notion of the numbers of migrating salmon at Daguerre Point Dam might be obtained, an improved fish ladder was installed by the Army Engineers at the south end of the dam during the fall of 1938 (Fig. 7). From October 24 to December 17, 64 salmon were counted over the fish ladder (see Appendix G). A few more probably went up without being seen, and undoubtedly more would have used the ladder if its approaches had been more accessible. The fact remains that the salmon run at the point is now very small. It must be kept in mind that salmon tend to return to the place where they were spawned and that, since few have been able to get above the dam in past years, a small run might be expected. During the fall several salmon were reported seen below the Colgate Head Dam on the North Fork of the Yuba, 35 miles above the Daguerre Point Dam.

### 1954

The low summer flow in the Yuba River was increased slightly by early fall rains and salmon arrived below Daguerre Point Dam on November 3. Neither of the fish ladders at the dam was operating since the Hallwood Canal continued to divert most of the flow in the river to supply the needs of a number of gun clubs.

By digging a trench through a gravel bar the spawning survey crew was able to direct a small flow down the fish ladder on the north side of the dam. Salmon started moving up the ladder at once. Although many of the fish had difficulty negotiating the jumps because of the small flow, 314 salmon were counted through the ladder in a two hour period. Three steelhead were also observed.

Most of the salmon in the Yuba spawned upstream from Daguerre Point in 1954. Although the survey crew was able to spend only a limited amount of time on this river, 222 dead salmon were recovered. This figure was estimated to be approximately 5 percent of the total run. The population was estimated at 5,000 salmon.

### 1955

## PRELIMINARY

The 1955 salmon run in the Yuba River was very poor. During the latter part of October and early November when salmon usually enter the river the Yuba was virtually dry. In fact there was not even standing water in the stream bed for some distance below Daguerre Point Dam. It seems reasonable to assume that many of the Yuba River salmon which were blocked from their native stream continued on up the Feather River to spawn.

It was late November before there was an adequate flow in the river for salmon. At this time a small run was observed on the spawning beds. During December, 1955, carcasses were recovered on the Yuba and it was estimated that 10 percent of the run was examined. The entire run then was calculated to number 1,500 salmon.

### 1956

The Yuba River had sufficient flow to enable the 1956 salmon run to ascend the stream without difficulty. Most of the run spawned upstream from Daguerre Point Dam; however even in this section the extensive riffle areas were very lightly populated.

Favorable weather and water conditions enabled the survey crew to cover the river effectively. A total of 455 carcasses was counted. The run is estimated to number 5,000 salmon.

## 1957

The Yuba River contains some of the finest spawning riffles in the Central Valleys; however, low flows (no flows in some years) and unscreened diversions have kept the salmon population far below its potential. 1957 was a particularly poor year; although flows were adequate, salmon were scarce. A total of 154 carcasses was examined on the river between Blue Point Mine and the Baldwin Gravel Plant. The number of king salmon estimated to have spawned in the Yuba River in 1957 is 1205.

Another blow was struck to an already depleted run during November. A construction company, earlier in the year, built a check dam across the main channel of the river approximately  $\frac{1}{4}$  mile below Daguerre Point Dam so that they could remove gravel from this area. This diverted the river into a side channel which normally is dry except at high water stages. In November the check dam was removed and the stream reddiverted into a channel in which the construction company had been removing gravel.

This resulted in a loss in the side channel of the following: 51 completed redds, 15 incompleated redds, 36 ripe or partially spent salmon, 2 steelhead (Salmo gairdneri gairdneri), and a number of other game fish. Another 15 salmon, stranded in deeper holes, were also lost. Because of the nature of the terrain it was not possible to rescue those fish that were found alive.

## 1958

Lack of water posed a great threat to the salmon run on the Yuba in 1958. A combination of rain and timely releases of water averted what could have meant the loss of most of the run. As it was, 114 of the 199 salmon carcasses recovered between Daguerre Point Dam and the Baldwin Gravel Plant, the area which suffered from low water, were of unspawned fish.

Survey trips on the stream sections varied from four to six. A total of 1,525 carcasses was recovered from the Yuba River. It is estimated that 7,900 king salmon spawned in the Yuba River in 1958.

## 1959

PRELIMINARY

For the third consecutive year a portion of the salmon spawning run on this stream was lost.

The 1959 loss was a major one consisting of approximately one-third of the total run. The spawning population estimate for the Yuba was 10,000 salmon, including those spawners which were lost. A total of 2101 carcasses was recovered. The spawning population downstream from Daguerre Point Dam was estimated to be 3,500; all of these fish or their redds were lost.

The extensive fish loss was the result of attraction of salmon into the stream by relatively large flows with subsequent cutbacks and diversion which resulted in an almost dry streambed in the spawning area below Daguerre Point Dam.



### 1960

For the first year since 1956 no major losses of unspawned salmon and no losses of redds occurred on the Yuba River. Large flows which attracted salmon into the stream and subsequent cutbacks which stranded them did occur but fish rescue work and timely additional flows averted all but a negligible loss.

Eight survey trips were made between the Blue Point Mine and the Highway 20 Bridge and seven trips were made between Highway 20 and the Baldwin gravel plant. A total of 3,327 carcasses was recovered. The spawning population is estimated to be 20,400. This is the largest run recorded on the Yuba River since the surveys were initiated.

### 1961

Stream conditions were very good for carcass recovery throughout the spawning period. Stream flows were low and water was clear.

There were 1,597 dead salmon examined in eight trips in the upper two sections, and nine trips in the lower section. Several long, deep pools were surveyed by a diver to determine the percentage of carcasses missed by the regular survey crew. An insignificant number of dead salmon was observed.

The spawning population was an estimated 9,200 fish. This is approximately 50 percent as large as last year's stock.

A greater utilization of spawning gravels between Daguerre Point Dam and the Baldwin Gravel Plant occurred this year. This was the result of negotiations with the Water District for maintenance of adequate spawning flows.

Stranding and loss of salmon which has occurred in past years through release and subsequent cutback of large flows was averted this year by installation of a wire barrier above Highway 99 bridge. This prevented fish from moving upstream the first week in September through the middle of October.

### Spring Run

No remaining spring run in the Yuba River.

PRELIMINARY

1962

Fall Run

The river was at flood stage during part of October. The water remained high and roily throughout the entire season. Recovery conditions were poor and survey trips hazardous. Due to these conditions, recovery trips were reduced to less than one-half of normal. The main spawning activity again occurred between Daguerre Point Dam and Baldwin Gravel Plant.

In spite of adverse conditions 3,034 carcasses were recovered. This is almost twice the number examined last year under good recovery conditions. This year's estimate of 34,000 (34,300) fish is by far the largest estimated run in recent years.

Spring Run

No estimate made.

1963

Fall Run

Recovery conditions were poor during part of the spawning period, making carcass recovery difficult. Construction work at Daguerre Point Dam was in progress throughout the migration and spawning season. As a result of delays in construction schedules and severe flow fluctuations, an estimated 1,200 to 1,500 fish died in the construction area without spawning.

There were 3,896 carcasses recovered. The estimated population was 37,000 salmon. This is the largest run ever reported for the Yuba River.

Spring Run

No estimate made.

1964

Fall Run

Recovery conditions were fair during most of the survey period.

Six survey trips were made and 2,554 carcasses examined from an estimated spawning population of 34,900 fish.

Spring Run

No estimate made.

1965

Fall Run

Eight survey trips were made on the Yuba River and 887 carcasses recovered from an estimated spawning population of 10,200 fish.

Spring Run

No estimate was made.

PRELIMINARY

1966

Fall Run

High and muddy water throughout most of the season made carcass recovery very difficult and also made anything better than a crude estimate impossible.

Five survey trips were made on the Yuba River, and 78 carcasses were recovered. The estimated spawning population was 7,800 fish (Table 9).

Spring Run

No estimate was made.

1967

Fall Run

The water flow was murky for most of the spawning period due to either construction work at the new Bullard's Bar dam site or runoff, or both. This made for poor recovery conditions.

Six survey trips were made on the Yuba River this year and 3,026 carcasses recovered. The estimated salmon spawning population from Blue Point Mine to Baldwin Gravel Plant was 23,500 fish (Table 7).

Spring Run

No estimate.

1968

Fall Run

Spawning activity was light throughout the entire season. Flows were fairly constant at 600 to 700 cfs, but upstream construction caused considerable turbidity, resulting in poor recovery conditions.

Six inventory trips were made on the Yuba River and 742 carcasses recovered for an estimated spawning population of 7,000 salmon (Table 5).

Spring Run

Extinct

Tagged Fish

Twenty-one tagged salmon (spaghetti-type tags) were recovered; these fish were tagged by the U. S. Fish and Wildlife Service at a weir near Baldwin Gravel Plant.

PRELIMINARY